



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,568	12/21/2004	Mary-Luc Champel	PF020079	6835
24498	7590	01/14/2008		
THOMSON LICENSING LLC Two Independence Way Suite 200 PRINCETON, NJ 08540			EXAMINER HICKS, CHARLES N	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 01/14/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/518,568

Applicant(s)

CHAMPEL ET AL.

Examiner

Charles N. Hicks

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-20 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/21/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Walters (US Patent No. 5,768,593), hereinafter referred to as Walters.

3. Regarding claim 1, Walters discloses a programmable data processing device comprising:

a loading engine for receiving portions of code of a first type and/or data from a stream of a broadcast network in which said portions are repeatedly transmitted (**fig. 1-3, col. 7, lines 7-23** *note that since there is a possibility that data may already be there, hence it has been repeated*),

a storage means for storing the portions received by the loading engine (**fig. 1-3, col. 7, lines 7-23**),

an execution engine for executing an application embodied by the received portions (**fig. 1-3, col. 7, lines 45-62**),

a translating engine for translating the first type code into a native code of the execution engine wherein the translating engine is adapted to store the thus compiled portion in the storage means, to compile at least a certain one of said received portions

into native code, these portions being selected by a control information received from the stream, and to interpret other portions of code, and that the execution engine is adapted to process compiled code and interpreted code within a same application (**fig. 1-3, col. 6, lines 60-68, col. 7, lines 1-23**).

4. Regarding claim 10, Walters discloses a data processing method, comprising the steps of:

a) receiving portions of code of a first type and/or data from a stream of a broadcast network in which said portions are repeatedly transmitted, wherein the set of portions transmitted in said stream embodies one or more data processing applications (**fig. 4-5, col. 10, lines 10-46** *note that since there is a possibility that data may already be there, hence it has been repeated*);

b) storing predetermined ones of said portions in a storage means (C) (**fig. 2-4, col. 9, lines 9-37**),

c) compiling in a translation engine at least one of said portions comprising first type code into native code of an execution engine, the compiled portions being selected by a control information received from the stream (**fig. 1-3, col. 6, lines 60-68, col. 7, lines 1-23**),

d) in the execution engine, carrying out one of said data processing applications by executing the compiled native code of the selected portions belonging to said one application and by interpreting non-selected portions of this application (**fig. 1-3, col. 7, lines 45-62**).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 2-9, and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walters, in view of Thomas (US Patent No. 7,305,696 B2), hereinafter referred to as Thomas.

8. Regarding claims 2-4, and 12-14, Walters fails to disclose the data processing device wherein the control information is DSM-CC pre-fetch signaling. However, Thomas discloses the data processing device wherein the control information is DSM-CC pre-fetch signaling (**fig. 7-9, 37-40, col. 17, lines 21-46, col. 19, lines 39-54**).

Motivation to combine the references is due to the fact that both references deal with

universal digital broadcast reception by a generic user interface. The invention would have been obvious to one of ordinary skill in the art at the time of the invention.

9. Regarding claim 5, Walters discloses the data processing device wherein the translating engine is adapted to extract the control information from a payload module of the DSM-CC carousel (**fig. 4, col. 9, lines 64-68, col. 10, lines 1-17**).

10. Regarding claim 6, Walters discloses the data processing device wherein the translating engine is adapted to extract compiling optimization information relating to a portion of code to be compiled from said payload module and to heed the compiling optimization in the process of compiling said portion of code (**fig. 4, col. 9, lines 64-68, col. 10, lines 1-17**).

11. Regarding claim 7, Walters discloses the data processing device wherein the translating engine is adapted to decide whether to compile or to interpret a given portion of first type code according to control information received from the execution engine (**fig. 1-3, col. 7, lines 45-62**).

12. Regarding claim 8, Walters discloses the data processing device wherein the translating engine, during compilation of a given first type code portion, is adapted to ignore control information requiring said portion to be interpreted, and to finish compiling the portion (**fig. 1-3, col. 7, lines 42-63**).

13. Regarding claim 9, Walters discloses the data processing device wherein the translating engine, when receiving control information requiring a given first type code portion to be interpreted during compilation of said portion, is adapted to abandon the compilation and to start interpreting the portion (**fig. 4-5, col. 11, lines 9-41**).

14. Regarding claim 15, Walters discloses the data processing method wherein the control information is a payload module of the DSM-CC carousel (**fig. 4, col. 9, lines 64-68, col. 10, lines 1-17**).

15. Regarding claim 16, Walters discloses the data processing method wherein the control information further comprises compiling optimization information relating to a portion of code to be compiled, and the translation engine heeds the compiling optimization information when compiling said portion of code (**fig. 4, col. 9, lines 64-68, col. 10, lines 1-56**).

16. Regarding claim 17, Walters discloses the data processing method wherein the translating engine decides based on said control information from the execution engine whether to compile or to interpret a given first type code portion (**fig. 2-4, col. 7, lines 43-63**).

17. Regarding claim 18, Walters discloses the data processing method wherein if the translation engine receives control information requiring a given portion to be interpreted during compilation of said portion, it ignores the control information and finishes compiling the portion (**fig. 2-4, col. 7, lines 43-63**).

18. Regarding claim 19, Walters discloses the data processing method wherein if the translation engine receives control information requiring a given portion to be interpreted during compilation of said portion, it abandons the compilation and starts interpreting the portion (**fig. 2-4, col. 7, lines 43-63**).

19. Regarding claim 20, Walters discloses the data processing method in which, after step c), memory space allocated to the first type code of the compiled portion is released for overwriting (**fig. 2-4, col. 8, lines 1-40**).

Allowable Subject Matter

20. Claim 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ukai (US Patent No. 6,920,549 B1) discloses a control device that allows fetching instructions. Saito (US Patent No. 6,523,696 B1) discloses a

Application/Control Number:
10/518,568
Art Unit: 2623

Page 8


control device for providing uniform broadcast service. Kamieniecki (US Patent No. 7,162,733 B2) discloses a method and apparatus for automatic set-up of electronic devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles N. Hicks whose telephone number is 571-272-3010. The examiner can normally be reached on M-F 7:30AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CNH


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600